IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):     Sheueling Chang Shantz et al.

Title:            METHOD AND APPARATUS FOR IMPLEMENTING PROCESSOR
                  INSTRUCTIONS FOR ACCELERATING PUBLIC-KEY
                  CRYPTOGRAPHY

Application No.:  10/626,420          Filed:           July 24, 2003

Examiner:        Not yet assigned     Group Art Unit:  3621

Atty. Docket No.:  004-9388

July 1, 2004

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## INFORMATION DISCLOSURE STATEMENT
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Dear Sir:

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☒     Form(s) PTO-1449 (1 pages), including copy(ies) of 11 reference(s).
☐     Other: n/a

to the Examiner's attention in the above-identified application. Citation of such information shall not be construed as:

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by a foreign patent office in a counterpart foreign application, an English language version of the search report or action that indicates the degree of relevance found by the foreign office.
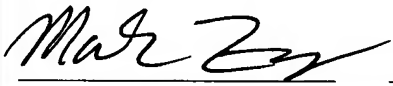
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☐ This Information Disclosure Statement is filed within three months of the filing date of a national application other than a continued prosecution application under § 1.53(d) or within three months of entry of the national stage as set forth in § 1.491 in an international application. Therefore, no fee is required.

☒ The undersigned believes that this Information Disclosure Statement is being filed before the mailing date of a first Office action on the merits or before the mailing date of a first Office action after the filing of a request for continued examination under § 1.114. Therefore, no fee is believed required.

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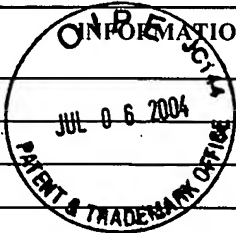☐ facsimile transmitted to the US Patent and Trademark Office.

Mark Zagorin     7/1/04    Date

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Respectfully submitted,

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Application No.: 10/626,420

| U.S. Department of Commerce, Patent and Trademark Office | | | Attorney Docket No.: | *004-9388* |
|---|---|---|---|---|
| | | | Application No.: | *10/626,420* |
| **INFORMATION DISCLOSURE STATEMENT BY APPLICANT** | | | Applicant(s): | *Sheueling Chang Shantz et al.* |
| (Use several sheets if necessary) | | | Filing Date: | *July 24, 2003* |
| | | | Group Art Unit: | *3621* |
| | | | Date Submitted: | *July 1, 2004* |

## NON PATENT LITERATURE DOCUMENTS

| *Examiner Initial | Cite No. | (Including name of author in capital letters, title of article, title of item, date, pertinent pages, volume-issue number(s), publisher, city and/or country where published.) |
|---|---|---|
| | AA | Intel® Itanium™ Processor, "High Performance On Security Algorithms (RSA Decryption Kernel)," Intel Corporation, 2001, pp. 1-8. |
| | AB | Intel®, "Intel® Itanium™ Architecture Software Developer's Manual, Volume 1: Application Architecture," Revision 2.1, October , 2002, 2 pages. |
| | AC | Großschädl, Johann, "Instruction Set Extension for Long Integer Modulo Arithmetic on RISC-Based Smart Cards," Proceedings of the 14th Symposium on Computer Architecture and High Performance Computing, 2002, 7 pages. |
| | AD | Koç, Cetin Kaya, "High-Speed RSA Implementation," Version 2.0, RSA Laboratories, November, 1994, pp. i-70. |
| | AE | Shantz, Sheueling Chang, "From Euclid's GCD to Montgomery Multiplication to the Great Divide," Sun Microsystems, June 2001, pp. 1-10. |
| | AF | Standards for Efficient Cryptography, "SEC 2: Recommended Elliptic Curve Domain Parameters," Certicom Research, September 20, 2000, pp. i-45. |
| | AG | Woodbury, A.D.; Bailey, Daniel V., Paar, Christof, "Elliptic Curve Cryptography on Smart Cards Without Coprocessors," The Fourth Smart Card Research and Advanced Applications (CARDIS2000) Conference, Bristok, UK, pp. 71-92. |
| | AH | H. Cohen, A. Miyaji, and T. Ono, "Efficient elliptic curve exponentiation using mixed coordinates", in K. Ohta and D. Pei, editors, Advances in Cryptology ASIACRYPT 98, pp. 51-65, Springer Verlag, 1998, LNCS 1514 |
| | AI | D. Bailey and C. Paar, "Optimal Extension Fields for Fast Arithmetic in Public-Key Algorithms." In H. Krawczyk, editor, Advances in Cryptography – CRYPTO '98, volume LNCS 1462, pages 472-485. Springer-Verlag, 1998. http://citeseer.ist.psu.edu/article/bailey98optimal.html, 14 pages. |
| | AJ | H. Pietiläinen, "Elliptic Curve Cryptography on Smart Cards," Master's Thesis, Helsinki University of Technology, Oct. 12, 2000, pp. i-81. |
| | AK | F. Morain and J. Olivos, "Speeding Up the Computations on an Elliptic Curve Using Addition-Subtraction Chains," Rapport de Recherche 983, INRIA, France, March 1989, http://citeseer.ist.psu.edu/morain90speeding.html, pp. 119-130. |
| | AL | |
| | AM | |
| | AN | |
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| | AP | |
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| Examiner | Date Considered |
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